

In the Claims:

1. (Currently Amended)      A ~~An acetabular~~ reamer, which comprises:
  - a) a cutting shell defining a spherical center and having a shell curvature comprising at least a portion of a first hemisphere extending from an apex to a lower edge ~~and comprising at least a portion of a hemisphere~~, the cutting shell being rotatable about a longitudinal axis; and
  - b) a plurality of cutting teeth thereon, wherein each cutting tooth comprises two buttress portions extending from the cutting shell and meeting an intermediate cutting edge ~~having a second~~ curvature as a line segment of a second hemisphere, wherein the line segment comprises a continuum of cutting edge radii, each originating at the spherical center with the second hemisphere being that is greater than the first hemisphere hemispherical curvature of the cutting shell and wherein the plurality of cutting teeth are rotatable about the longitudinal axis.
2. (Previously Presented)      The reamer of claim 1 wherein a generally circular hole precedes each of the cutting edges as the reamer is rotated for cutting.
3. (Previously Presented)      The reamer of claim 1 wherein the cutting teeth are arranged uniformly and spaced apart on the cutting shell.

4. (Previously Presented) The reamer of claim 3 wherein the cutting teeth are arranged in a spiral arrangement on the cutting shell.
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The reamer of claim 2 wherein the reamer includes a series of cutting teeth arranged uniformly and spaced apart on the cutting shell.
8. (Previously Presented) The reamer of claim 2 wherein the cutting teeth are arranged in a spiral configuration on the cutting shell.
9. to 14. (Cancelled)
15. (Currently Amended) A ~~An acetabular~~ reamer, which comprises:
  - a) a cutting shell that is rotatable about a longitudinal axis, wherein the cutting shell extends from an apex to a lower edge and has a curvature defined by a plurality of cutting shell radii of the same length extending from a focal point located on the longitudinal axis; and
  - b) a plurality of cutting teeth thereon, wherein each cutting tooth comprises two buttress portions extending from the cutting shell and meeting an intermediate cutting edge spaced furthest from the cutting shell, the cutting edge being continuously

defined from one buttress to the other buttress by a continuum of cutting edge radii of the same length with each radii extending ~~that each extend~~ from the same focal point as the plurality of cutting shell radii.

16. (Cancelled)

17. (New) The reamer of claim 15 wherein a generally circular hole precedes each of the cutting edges as the reamer is rotated for cutting.

18. (New) The reamer of claim 15 wherein the cutting teeth are arranged uniformly and spaced apart on the cutting shell.

19. (New) The reamer of claim 15 wherein the cutting teeth are arranged in a spiral configuration on the cutting shell.